

Belersdorf 670-HCL  
100718-246  
6713-Dr. Wi-ar

REMARKS
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**Amendment to the Claims**

Claims 6, 7 and 9-11 have been amended to be consistent with the scope of claim 1, i.e. claim 1 refers to microemulsions. Claims 1, 6, 7 and 9-11 are now pending. It is believed that no new matter has been added.

**35 U.S.C. 103(a) rejection**

- (1) Claims 1, 6, 7 and 9-11 were rejected as being obvious over Ascione et al. (U.S. Patent 5,858,334) in view of Gohla et al. (U.S. Patent 5,750,124).

The applicants' request reconsideration of this rejection as there appears to be a misunderstanding about the factual interpretation of the terms "macroemulsion" and "microemulsion". The examiner refers to pages 7 and 8 of the specification and appears to fixate on the particle size limitations as proof that Ascione et al. teaches a microemulsion. However, this is incorrect.

Particle size is only one of at least four characteristics which describe whether an emulsion is a macroemulsion or microemulsion. To further assist the examiner in seeing these differences, a copy of page 19 from classroom material of the course "*Surfactants, Micelles, Liposomes, and Liquid Crystals in Emulsions and Microemulsions*" by Professors Yuzhou Li and Stig E. Friberg (both of Clarkson University - Potsdam, NY) is submitted herewith.

In addition to particle size, other distinctive characteristics include appearance, thermodynamic stability and means of formation. If the examiner were to re-read the passages bridging the pages 7 and 8 of the specification, it can be seen that the applicants' description is consistent of the terms macroemulsion and microemulsion are consistent with their acknowledged meaning.

In light of these facts, it is noted that MPEP 2142 states:

"The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness [page 2100-123]...The ultimate determination of

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patentability is based on the entire record, by a preponderance of evidence, with due consideration to the persuasiveness of any arguments and any secondary evidence. *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). The legal standard of "a preponderance of evidence" requires the evidence to be more convincing than the evidence which is offered in opposition to it.

With regard to the rejections under 35 U.S.C. 103, ***the examiner must provide evidence which as a whole shows that the legal determination sought to be proved*** (i.e. the reference teachings establish a *prima facie* case of obviousness) ***is more probable than not.*** (emphasis added)

The only fact presented in support that Ascione et al. teaches a microemulsion is the particle size range which has in turn been shown by the applicants to be characteristic of a macroemulsion. There is no additional evidence that the emulsions of Ascione et al. possesses any of the other three properties characteristic of a microemulsion. Therefore, at this point, it is more probable than not that Ascione et al. does not teach a microemulsion.

Even if it could somehow be proven that Ascione et al. does teach microemulsions, the examiner also acknowledged that Ascione et al. lacks a specific teaching with regard to the properties of emulsifiers and relies on Gohla et al. to address this deficiency. However, the applicants' believe this is an ineffective combination for the following reasons:

- (a) It is unclear Gohla et al. itself is a microemulsion;
- (b) Gohla et al. clearly teaches a water-in-oil-in-water (W/O/W) emulsion whereas Ascione et al. is directed toward an oil-in-water (O/W) emulsion.

The argument for Gohla et al. not being a microemulsion is similar to the arguments against Ascione et al. as presented above. Even if both the Ascione et al. and Gohla et al. references could be shown to be microemulsions, with regard to the ability to combine Gohla et al. with Ascione et al., it is unclear what is the factual support that teachings directed toward a W/O/W microemulsion would be equally applicable to an O/W microemulsion especially when it is known in the art that a characteristic of a microemulsion is thermodynamic stability? In addition, given the number of possible choices of additional ingredients which could have been added to the emulsion of Ascione et al., what was the motivation to "pick and choose" the emulsifiers of Gohla et al. when

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one of the tenets of establishing a *prima facie* case of obviousness is that the examiner is not allowed to use the applicant's claims as a template to determine what would have been obvious at the time of filing the applicants' invention.

For any of the above reasons, it is believed that the combination of Ascione et al. in view of Gohla et al. does not render the applicants' claimed invention to be obvious.

- (2) Claims 1, 6, 7 and 9-11 were rejected as being obvious over Gohla et al. (U.S. Patent 5,750,124) in view of applicants' admission.

The applicants' discussion of the Gohla et al. reference is to be considered repeated here. As the alleged admission is primarily directed toward the use of shea butter (which was acknowledged by the examiner as a difference between the applicants' claimed invention and the invention of Gohla et al.), the admission does not serve to address the additional differences raised above with regard to Gohla et al.

Even when taking the combination of Gohla et al. and applicant's admission at face value, one of ordinary skill in the art would see that such a combination is based upon improper hindsight construction. As the PTO often reflexively recites *In re McLaughlin* (see MPEP 2145 section X. A.) when confronted with a hindsight reconstruction argument, the applicants will further explain why *McLaughlin* is inapplicable here.

*McLaughlin* dealt with a boxcar invention where the prior art essentially described the claimed invention save for a single element (i.e. there were a limited number of permutations which needed to be considered) which was addressed with a secondary reference and was well known to be used at the time the invention was made. This is not the case in the present application where stepping back to the time the invention was made and without benefit of the applicants' claims as a guideline, there would have been a virtually unlimited number of permutation which could have been made to the prior art.

The ruling on obviousness in *In re Fine*, 5 USPQ2d 1596 (Fed. Cir. 1988) closely adheres to the position maintained by the applicants and is reproduced in part below:

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"Obviousness is tested by 'what the combined teachings of the references would have suggested to those of ordinary skill in the art.' *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 1181 (CCPA 1981). But it 'cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination.' *ACS Hosp. Sys.*, 732 F.2d at 1577, 221 USPQ at 933. And 'teachings of references can be combined *only* if there is some suggestion or incentive to do so.' *Id.* Here the prior art contains none.

Instead, the Examiner relies on hindsight in reaching his obviousness determination...

It is essential that 'the decisionmaker forget what he or she has been taught at trial about the claimed invention **and cast the mind back to the time the invention was made**...to occupy the mind of one skilled in the art **who is presented only with the references**, and who is normally guided by the then-accepted wisdom in the art.' *Id.* One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." *Id.* at 1595, 1600.

In *Texas Instruments Inc. v. International Trade Commission*, 26 USPQ2d 1018 (Fed. Cir. 1993). It was further stated that "[a]bsent such suggestion to combine the references, respondents can do no more than piece the invention together using the patented invention as a template. Such hindsight reasoning is impermissible." see *Id.* at 1029.

Applying these rulings to the present facts at hand, the question becomes:  
"As of 27 November 2000 (the filing date of this application), what would have motivated one of ordinary skill in the art to modify the teachings of Gohla et al. to arrive at the presently claimed invention **when not having the luxury of the applicants claims to provide them with any guidance as to how to modify Gohla et al.'s teachings?**"

Gohla et al. is acknowledged by the examiner to lack shea butter and there is no teaching or suggestion within the specification which could be gleaned by one of ordinary skill in the art to add shea butter. The applicants admission, such that it can be described as such, merely acknowledges that shea butter is known compound. If one argues that additional ingredients could be added to Gohla et al., whether they are explicitly or implicitly disclosed in the Gohla et al. specification, there would be effectively an infinite number of possible permutations which are possible from the teachings of Gohla et al. As such, it is unclear how one of ordinary skill in the art would be directed and motivated to make the applicants' claimed invention without the benefit

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of the applicants' claims at the time the applicant filed their application.<sup>1</sup>

For any of these reasons, it is believed that the applicants' claimed invention is not obvious in light of Gohla et al. and the "applicants' admission".

**Closing**

Applicants also believe that this application is in condition for allowance. However, should any issue(s) of a minor nature remain, the Examiner is respectfully requested to telephone the undersigned at telephone number (212) 808-0700 so that the issue(s) might be promptly resolved.

Respectfully submitted,

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Attachment: Page 19 from classroom material of "*Surfactants, Micelles, Liposomes, and Liquid Crystals in Emulsions and Microemulsions*" by Professors Yuzhou Li and Stig E. Friberg (both of Clarkson University - Potsdam, NY), May 6<sup>th</sup>-10<sup>th</sup>, 2002.

**CERTIFICATE OF FACSIMILE TRANSMISSION**

I hereby certify that the foregoing Amendment under 37 CFR § 1.111 is being facsimile transmitted to the United States Patent and Trademark Office on the date indicated below:

Date: **10 November 2003**

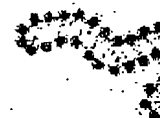
By: Agata Glinska  
Agata Glinska

<sup>1</sup> *In re Rice*, 178 USPQ 478, 480 (CCPA 1973) also speaks to the issue of obviousness and hindsight reconstruction and stated that, "...the board said, referring to the appellant's ingredients, 'It should be noted that an infinite number of combinations is possible.' Accepting that as an approximation to the truth, we fail to see the obviousness in devising appellant's.....[invention] as claimed." *Id.* at 480.



# ACS Short Course

**Surfactants, Micelles, Liposomes  
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Emulsions		Microemulsions	
Appearance	Turbid	Transparent (Blueish, Grayish)	
Droplet Size	0.1-100 $\mu$ m	5-100nm	
Thermodynamic Stability	Unstable	Stable	
Formation	Energy Required	Spontaneous	

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